

# **Islamic Thought and Civilization (JITC)**

Volume 11 Issue 2, Fall 2021

 $ISSN_P$ : 2075-0943,  $ISSN_E$ : 2520-0313

Journal DOI: <a href="https://doi.org/10.32350/jitc">https://doi.org/10.32350/jitc</a>. Issue DOI: <a href="https://doi.org/10.32350/jitc.11.2">https://doi.org/10.32350/jitc.11.2</a>

Homepage: https://journals.umt.edu.pk/index.php/JITC

Journal QR Code:



Coronavirus 2019 (Covid-19) Outbreak Lockdown: The Effects on Article: Spiritual, Physical, Emotional, Intellectual and Financial States of the

**Muslim Believers** 

Author(s): Khairul Zahreen Mohd Arof<sup>1</sup>, Mohd Daud Awang<sup>2</sup>, Mohd Hambali Abd

Rashid<sup>3</sup>, Syuhaida Ismail<sup>1</sup>

<sup>1</sup>Department of Technology and Informatics, Universiti Teknologi Malaysia

<sup>2</sup>Department of Human Ecology, Universiti Putra Malaysia, Selangor, Malaysia <sup>3</sup>Department of Social Sciences and Humanities, Universiti Teknologi Malaysia,

Kuala Lumpur, Malaysia

Published: Fall 2021

Article DOI: https://doi.org/10.32350/jitc.11.2.22



QR Code:

Citation:

Affiliation:

Arof, Khairul Zahreen Mohd, Mohd Daud Awang, Mohd Hambali Abd Rashid, and Syuhaida Ismail. "Coronavirus disease 2019 (Covid-19) Outbreak lockdown: The effects on spiritual, physical, emotional, intellectual and financial states of the Islam believers." *Journal of Islamic Thought and Civilization* 11, no. 2 (2021): 388–399.

Crossref



Copyright Information:

This article is open access and is distributed under the terms of Creative Commons Attribution 4.0 International License



Publisher Information:

Department of Islamic Thought and Civilization, School of Social Science and Humanities, University of Management and Technology, Lahore, Pakistan























# Coronavirus Disease 2019 (Covid-19) Outbreak Lockdown: The Effects on Spiritual, Physical, Emotional, Intellectual and Financial States of the Islam Believers

## Khairul Zahreen Mohd Arof\*

Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia

# **Mohd Daud Awang**

Faculty of Human Ecology, Universiti Putra Malaysia, Selangor, Malaysia

## Mohd Hambali Abd Rashid

Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia

## Syuhaida Ismail

Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia

#### **Abstract**

Coronavirus Disease 2019 (COVID-19) outbreak was declared by the World Health Organization (WHO) as a global health emergency and global pandemic on March 11, 2020. In controlling the quick spreading of COVID-19, the enforcement of lockdown has been employed in many counties. Unfortunately, the lockdown affects all industries as well as the whole nation in terms of spiritual, physical, emotional, financial, and intellectual states. Therefore, this paper attempts to examine the effects of lockdown on spiritual, physical, emotional, intellectual, and financial states of the Islam believers from Malaysia, Oman, Yemen, Saudi Arabia, Egypt, and Turkey. Through systematic literature review, this paper designed a questionnaire survey and collected information from 208 respondents. Prior to the primary data collection, a pilot study was conducted to test the reliability of the designed questionnaire survey. This paper found that the COVID-19 lockdown has positive effects on the spiritual, intellectual, and physical states of the believers of Islam. On the other hand, the COVID-19 lockdown also leads to unstable emotion of the believers of Islam as well as the financial issues. The findings may help in future study, religious departments, and the authority bodies of the countries to strategize the plan of actions in minimising the impact of lockdown on the nations.

*Keywords*: Comparative study; COVID-19 outbreak; Effects of lockdown; Believers of Islam, lockdown

<sup>\*</sup>Corresponding concerning this article should be addressed to Khairul Zahreen Mohd Doctoral Candidate, Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia khairulzahreen@gmail.com



## Introduction

Coronavirus Disease 2019 (COVID-19) was declared by the World Health Organization (WHO) as a global health emergency and global pandemic on March 11, 2020. In controlling the rapid spread of COVID-19, the enforcement of lockdown has been employed in many counties. Unfortunately, the lockdown affects all industry as well as the whole nation in terms of spiritual, physical, emotion as well as the intellectual states of many nations. Many studies show that the lockdown leads to anxiety. On the other hand, some of the other researchers has reported that lockdown affects the believers positively. Although enforcement of lockdown has made it necessary the closure of the religious centres such as mosque, temple, and church. This closure has made ample time available for the believers to worship at home. 4 Therefore, this paper aims to examine the effects of lockdown on spiritual, physical, emotional, intellectual, and financial of the believers of Islam.

### 2. Literature Review

Many studies have proven the effects of lockdown enforcement due to the COVID-19 outbreak. The enforcement has been applied by the governments in many countries such as Malaysia, Oman, Jordan, Saudi Arabia, Egypt, and Turkey. The enforcement of lockdown is aimed at controlling the spread of COVID-19 by flattening the curve of infection as shown in Figure 1 on the projections of coronavirus infections for

<sup>4</sup>Ibid.

<sup>&</sup>lt;sup>1</sup>Sui-Lee Wee, Donald G. McNeil Jr., and Javier C. Hernández, "W.H.O. Declares Global Emergency as Wuhan Coronavirus Spreads." *New York Times*, January 30, 2020; R S Sarada Devi and Azlan Shah Nazrudin, "Emosi Terperuk di Rumah," [Emotions at Home]. *Harian Metro*, April 6, 2020.

<sup>&</sup>lt;sup>2</sup>Sarada Devi, and Nazrudin, "Emosi Terperuk di Rumah." [Emotions at Home]; Erda Khursyiah Basir, "COVID-19: Risiko Masalah Mental, Perlu Penyelesaian Terbaik- Pakar," [COVID-19: Risk of Mental Problems, Need the Best Solution- Experts]. *Bernama*, April 2, 2020; Shweta Singh et al., "Impact of COVID-19 and Lockdown on Mental Health of Children and Adolescents: A Narrative Review with Recommendations," *Psychiatry Research* 293, no. 113429 (November 2020):1-10; Pavan Hiremath et al., "COVID 19: Impact of Lock-Down on Mental Health and Tips to Overcome," *Asian Journal of Psychiatry* 51, no. 102088 (June 2020): 1-2.

<sup>&</sup>lt;sup>3</sup>Rozita Talha, "Kajian Kes Impak Perintah Kawalan Pergerakan Kepada Penduduk Malaysia," [Case Study Impacts Movement Control Orders to Malaysians], *Department of Statistics Malaysia Official Portal* (2020): 1-3; Mohamad Norhadie Sahari, "PKP Tidak Halang Umat Islam Jayakan World #QuranHour," [PKP Does Not Stop Muslims Jayakan World #QuranHour]. *Utusan Borneo Online*, May 15, 2020; Hamka Abdul Razak et al., "Perintah Kawalan Pergerakan (PKP) Menggalakkan Penghayatan Rukun Negara," [Movement Control Order (PKP) Encourages The Perception of National Pillars]. (Project Paper, Universiti Kebangsaan Malaysia, June 2020); Muhammad Yusry Affandy Md Isa, "Peluang Fahami Kaedah Ibadah Ketika Wabak," [Opportunities to Understand The Method of Worship When Wabak]. *Berita Harian*, June 5, 2020; Mucahit Bilici, "Covid-19's Impact on American Muslims: Notes from Ramadan 2020," *The Maydan*, July 2, 2020.

benchmarking the uncontrolled and controlled outbreak scenarios. A study found that social distancing practice helps to flatten the curve of infection, thus it is preferred as one of the reasons to enforce social distancing.<sup>5</sup>

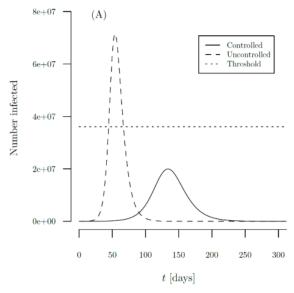


Figure 1. Projections of Coronavirus disease 2019 (COVID-19) infections for benchmarking the uncontrolled and controlled outbreak scenarios<sup>6</sup>

On the other hand, the lockdown leads to many other problems in terms of the spiritual, physical, emotional, and intellectual states of the believers nationwide Lockdown as summarised in Figure 2.<sup>7</sup> Figure 2 also illustrates the numbers that indicate the frequency of appearance in previous studies.

<sup>&</sup>lt;sup>7</sup>Sarada Devi and Nazrudin, "Emosi"; Basir, "COVID-19: Risiko"; Singh et al., "Impact of COVID-19"; Hiremath et al., "COVID 19: Impact"; Talha, "Kajian Kes"; Sahari, "PKP Tidak Halang"; Abdul Razak et al., "Perintah Kawalan Pergerakan"; Md Isa, "Peluang Fahami Kaedah"; Bilici, "Covid-19's Impact on American Muslims"; Daniel Spitzenstätter and Tatjana Schnell, "The Existential Dimension of The Pandemic: Death Attitudes, Personal Worldview, and Coronavirus Anxiety," *Death Studies* (December 24, 2020): 1-11; Mehmet Ozalp, "How Coronavirus Challenges Muslims' Faith and Changes Their Lives," *The Conversation* (January 14, 2021); Ehwan Ngadi, "COVID19: Implikasi Pengajaran dan Pembelajaran Atas Talian," [COVID19: Implications of Online Teaching and Learning]. *Risalah USIM* (August 5, 2020).



<sup>&</sup>lt;sup>5</sup>Linda Thunström et al., "The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19," *Journal of Benefit-Cost Analysis* 11, no. 2 (May 21, 2020): 179-195.

<sup>&</sup>lt;sup>6</sup>Lalitha Ramadass et al., "Applying Deep Learning Algorithm to Maintain Social Distance in Public Place Through Drone Technology," *International Journal of Pervasive Computing and Communications* 16, no. 3 (June 10, 2020): 223-234.

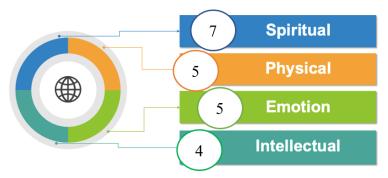


Figure 2. Summary of the effects of Coronavirus disease 2019 (COVID-19) lockdown

Table 1 tabulates the effects of COVID-19 to spiritual, physical, emotional, intellectual, and financial states of an individual from previous studies. The effects are tabulated based on the frequency of appearance.

Table 1. Effects of Coronavirus disease 2019 (COVID-19) lockdown to spiritual, physical, emotional, intellectual, and financial states of an individual

Effects of COVID 10 Level-1	Authors									- T-4-1			
Effects of COVID-19 Lockdown		3	4	5	6	7	8	9	10	13	14	15	- Total
Spiritual					/	/	/	/	/	/	/		7
Lockdown encourages Islam													
believers to worship at home					/	/	/	/	/				5
with my family members													
Lockdown encourages Islam						/	/		/				3
believers to recite al-Quran more						/	/		/				3
Lockdown increases awareness													
among the Islam believers to							/	/		/			3
worship													
Lockdown encourages Islam													
believers to practice more							/		/		/		3
sunnah													
Lockdown encourages Islam													
believers to involve in charity										/			1
works													
Lockdown encourages Islam											/		1
believers to donate more											/		1
Lockdown prevents Islam													
believers to perform wrongdoing											/		1
action													
Physical	/	/	/	/								/	5
Lockdown leads to body shaking	/			/									2

Ess a south to the	Authors												
Effects of COVID-19 Lockdown		3	4	5	6	7	8	9	10	13	14	15	- Total
Lockdown leads to difficulty in	/			/									2
breathing	/			/									2
Lockdown leads to feeling	/			/									2
pressure at chest	/			/									2
Lockdown leads to more			/										1
physical exercise			/										1
Emotional	/	/	/	/								/	5
Lockdown leads to anxiety	/	/	/	/									4
Lockdown leads to negative	/											/	2
emotion	,											/	
Lockdown leads to depression		/		/									2
Lockdown leads to frustration			/	/									2
Lockdown leads to fear			/										1
Lockdown leads to uncertainty			/										1
feeling			,										1
Lockdown leads to feel isolated			/										1
Lockdown leads to anxiety			/										1
Intellectual								/	/	/		/	4
Lockdown encourages to									/	/		/	3
attending more online classes									,	,		,	J
Lockdown encourages to									/	/		/	3
attending online training									,	,		,	J
Lockdown encourages to reading									/	/		/	3
more									,	,		,	
Lockdown encourages to seeking								/	/			/	3
new interest and knowledge													_
Financial			/	/	/								3
Lockdown leads to the loss of			/	/	/								3
financial source					٠.								_
Lockdown leads to higher debt			/	/	/								3
Lockdown leads to difficulty to													_
buy daily needs due to the			/		/								2
financial reason													

# 3. Methodology

This paper adopted a quantitative research method via questionnaire survey. A systematic literature was first carried out to collect the secondary data of this paper to design the research instrument and questionnaire survey. Prior to the primary data collection, a pilot study was conducted to test the reliability of the questionnaire survey

with 10 percent of the expected sample. The designed questionnaire survey is considered reliable with the Cronbach's Alpha result was 0.7 as recommended by Arof in 2020. The primary data was analysed using frequency analysis and relative importance index (RII). The variable of the study, which was the effects of COVID-19 on spiritual, physical, emotional, and intellectual states of the Islam believers were ranked from the most critical to the least critical. Based on Table 2, communication challenges were shortlisted and ranked by considering challenges with equal or more than 60 percent only. Communication challenges equal or more than 60 percent are either considered as high-medium effect (H-M-C) or high effect (H-C).

Table 2. Level of effect based on Relative Importance Index (RII) range

RII Range	Description
$0.80 \le RII \le 1.00$	Highly effect (H-E)
$0.60 \le RII < 0.80$	high-medium effect (H–M-E)
$0.40 \le RII < 0.60$	medium effect (M-E)
$0.20 \le RII < 0.40$	medium-low effect (M-L-E)
$0.00 \le RII \le 0.20$	low critical (L-E)

Adopted and modified<sup>9</sup>

## 4. Result and Discussion

Prior to the primary data collection, a pilot study was conducted to ensure the reliability of the designed questionnaire. The result of Cronbach's alpha calculated from the pilot study with 23 respondents was 0.92, which indicates that the designed questionnaire is reliable. This managed to collect 208 respondent forms from Islamic countries, namely Yemen (18.70 percent), Turkey (13.70 percent), Egypt (12.90 percent), Saudi Arabia (19.60 percent), Oman (15.80 percent), and Malaysia (33.00 percent). Most respondents were bachelor's degree holders (44.20 percent) with the age ranged between 21 and 30 years old (56.70 percent). The respondents consisted of 50 percent male and 50 percent female. Figure 3 illustrates the demographic details of the respondents.

<sup>&</sup>lt;sup>8</sup>Khairul Zahreen Mohd Arof et al., "Critical Strategies for Construction Players in the Adoption of Biophilic City Concept in Malaysia," *Planning Malaysia* 18, no. 1 (2020): 181-192.

<sup>&</sup>lt;sup>9</sup>Oluwole P. Akadiri, "Development of a Multi-criteria Approach for the Selection of Sustainable Materials for Building Projects," (PhD diss., University of Wolverhampton, February 2011); Raja Rafidah Raja Muhammad Rooshdi et al., "Relative Importance Index of Sustainable Design and Construction Activities Criteria for Green Highway," *Chemical Engineering Transactions* 63 (2018): 151-156.

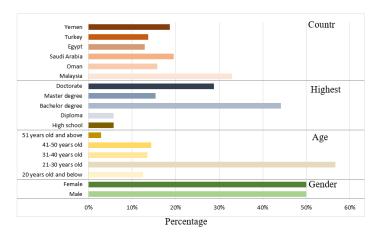


Figure 3. Demographic data

The primary results of this research regarding the effect of COVID-19 lockdown to the Islam believers are tabulated in Table 3. These findings found the effects of COVID-19 lockdown on Islam believers' spiritual and intellectual states as high-medium critical (H-M-C). This indicates that lockdown encourages Islam believers to be closer to the Creator. The pandemic makes the Islam believers go back to fitrah and increase their awareness to worship. The ample time due to lockdown allows the Islam believers to worship at home with family members.

Also, the intellectual state of the Islam believers is positively affected during COVID-19 lockdown. The ample time during the lockdown allows the Islam believers to attend online classes and trainings, seek new interest and knowledge, spend more time in public discussions, and read more books. On top of that, the COVID-19 lockdown leads the believers of Islam to be more concerned about self-health by conducting physical exercise and practicing a balanced diet. Unfortunately, some of the respondents gained weight during the lockdown. It could be due to the negative emotional effects of COVID-19 lockdown such as anxiety and depression.

On the other hand, COVID-19 lockdown is negatively affecting the emotions and financial states of the believers of Islam. The believers of Islam sleep more, experience uncertainty feeling, and feel isolated during lockdown. Many of the believers of Islam are financially affected during the COVID-19 lockdown due to the loss of financial sources and unable to find a job that have caused difficulty to buy daily needs. A study has urged the believers of Islam to avoid any consequences that tend them to the disease and accept the decreed with patience and hoping blessings, then Allah will reward martyr.10 The results in Table 3 are arranged by ranks referring to RII.

<sup>&</sup>lt;sup>10</sup>Irfan I. S, "Pandemic and Islamic Point of View Based on Hadith Plague," *Journal of Critical Reviews* 7, no. 8 (2020): 1017-1020.



Table 3. Effects of Coronavirus disease 2019 (COVID-19) lockdown to Islam believers

Effects of COVID-19 Lockdown to Islam Believers		RII	Rank	Ave	Ave	
Spiritual	More awareness to worship during		1	RII	Rank	
state of the	lockdown	0.81	-			
Islam	Allows to worship at home with my family	0.01	1			
believers	members during lockdown	0.81				
	Allows to practice more sunnah during	0.73	2			
	lockdown	0.73		0.71	1	
	Reciting al-Quran more during lockdown	0.69	3			
	Donate more during lockdown	0.67	4			
	Lockdown prevents wrongdoing action	0.67	4			
	Involves more in charity works during	0.61	5			
	lockdown					
Intellectu	Attending online classes during lockdown	0.73	1			
al state of	Seeking new interest and knowledge during	0.72	2			
the Islam	lockdown		2			
believers	Spending more time on knowledge	0.70	3	0.68	2	
	discussion during lockdown	0.64	4			
	Reading more during lockdown Attending in online training during	0.04	5			
	lockdown	0.61	3			
Emotion	Sleeping more during lockdown	0.65	1			
state of	Experiencing uncertainty feeling during		2			
the Islam	lockdown	0.62	_			
believers	Feeling isolated during lockdown	0.61	3			
	Experiencing negative emotion during	0.50	4			
	lockdown	0.59		0.50	3	
	Experiencing frustration during lockdown	0.59	4	0.58	3	
	Experiencing difficulty to sleep during	0.56	5			
	lockdown	0.50				
	Experiencing fear during lockdown	0.56	5			
	Experiencing anxiety during lockdown	0.55	6			
	Experiencing depression during lockdown	0.53	7			
Financial	Financially affected during lockdown	0.70	1			
state of	Not able to find a job during lockdown	0.58	2			
the Islam	Experiencing difficulty to buy daily needs	0.56	3	0.57	4	
believers	due to the financial reason			0.07	·	
	Lost financial source during lockdown	0.54	4			
	Experiencing higher debt during lockdown	0.44	5	0.77	_	
	Taking care of my health during lockdown	0.70	1	0.55	5	

Effects of	COVID-19 Lockdown to Islam Believers	RII	Rank	Ave RII	Ave Rank
Physical state of	Conducting physical exercise during lockdown	0.68	2		
the Islam	Gaining weight during lockdown	0.65	3		
believers	Practicing balance diet during lockdown	0.63	4		
	Experiencing body shaking during lockdown	0.42	5		
	Feels pressure at chest during lockdown	0.40	6		
	Experiencing difficulty to breath during lockdown	0.38	7		

*Note:* RII = Relative Importance Index; Ave RII = Average Impotence Index; Ave Rank = Average Rank

## 5. Conclusion

On the final note, this study managed to collect 208 respondents of Islam believers from six different counties, namely Yemen, Turkey, Egypt, Saudi Arabia, Oman, and Malaysia. This study found that the spiritual and intellectual states of the believers of Islam are positively affected with the COVID-19 lockdown. On the other hand, the emotional and the financial states of the believers of Islam are negatively affected by the COVID-19 lockdown, which is similar to the findings of the previous studies on the effects of lockdown to the public. In contrary, this paper found that the believers of Islam take better care of their diet and perform more physical exercises during the COVID-19 lockdown. This paper recommends to further study regarding the ways of the governments overcome these challenges based on their strategic action plans to encounter the emotional and financial issues amongst the Islam believers.

## Acknowledgement

The authors would like to express their sincere gratitude to the Ministry of Education Malaysia, Universiti Teknologi Malaysia (UTM), and Universiti Putra Malaysia (UPM) for providing the financial support for this paper to be published.

## **Bibliography**

Abdul Razak, Hamka., Mohammad Al-Aziim Mohammad Tahir, Muhamad Naim Hassan, Muhamad Khairul Rijal Hassan, Zufitri Amini Zainal Azmi, Muhammad Ahmad, Mohamad Nidzam Ruslan, and Muhammad Sabqi Abdullah. "Perintah Kawalan Pergerakan (PKP) Menggalakkan Penghayatan Rukun Negara." [Movement Control Order (PKP) Encourages The Perception of National Pillars]. Project Paper, Universiti Kebangsaan Malaysia, June 2020. <a href="http://dx.doi.org/10.13140/RG.2.2.27210.59848">http://dx.doi.org/10.13140/RG.2.2.27210.59848</a>

Akadiri, Oluwole P. "Development of a Multi-criteria Approach for the Selection of Sustainable Materials for Building Projects." PhD diss., University of Wolverhampton, February 2011. https://core.ac.uk/download/pdf/40027643.pdf

- Basir, Erda Khursyiah. "COVID-19: Risiko Masalah Mental, Perlu Penyelesaian Terbaik-Pakar." [COVID-19: Risk of Mental Problems, Need the Best Solution- Experts]. \*\*Bernama\*, April 2, 2020. <a href="https://www.bernama.com/bm/am/news">https://www.bernama.com/bm/am/news</a> covid-19.php?id= 1827662
- Bilici, Mucahit. "Covid-19's Impact on American Muslims: Notes from Ramadan 2020." *The Maydan*, July 2, 2020. <a href="https://themaydan.com/2020/07/covid-19s-impact-on-american-muslims-notes-from-ramadan-2020/">https://themaydan.com/2020/07/covid-19s-impact-on-american-muslims-notes-from-ramadan-2020/</a>
- Hiremath, Pavan., C S Suhas Kowshik, Maitri Manjunath, and Manjunath Shettar. "COVID 19: Impact of Lock-Down on Mental Health and Tips to Overcome." *Asian Journal of Psychiatry* 51, no. 102088 (June 2020): 1–2. <a href="https://dx.doi.org/10.1016/j.ajp.2020.102088">https://dx.doi.org/10.1016/j.ajp.2020.102088</a>
- Irfan, I. S., Mohd Daud Awang, Suhaimi Ab Rahman, and Aznan Hasan. "Pandemic and Islamic Point of View Based on Hadith Plague," *Journal of Critical Reviews* 7, no. 8 (2020): 1017–1020. http://dx.doi.org/10.31838/jcr.07.08.213
- Md Isa, Muhammad Yusry Affandy. "Peluang Fahami Kaedah Ibadah Ketika Wabak." [Opportunities to Understand The Method of Worship When Wabak]. *Berita Harian*, June 5, 2020. <a href="https://www.bharian.com.my/rencana/komentar/2020/06/696540/peluang-fahami-kaedah-ibadah-ketika-wabak">https://www.bharian.com.my/rencana/komentar/2020/06/696540/peluang-fahami-kaedah-ibadah-ketika-wabak</a>
- Mehmet Ozalp. "How Coronavirus Challenges Muslims' Faith and Changes Their Lives." *The Conversation*, January 14, 2021. <a href="https://theconversation.com/how-coronavirus-challenges-muslims-faith-and-changes-their-lives-133925">https://theconversation.com/how-coronavirus-challenges-muslims-faith-and-changes-their-lives-133925</a>
- Mohd Arof, Khairul Zahreen., Syuhaida Ismail, Chitdrakantan Subramaniam, Shamila Azman, Wan Nurul Mardiah Wan Mohd Rani, and Muhammad Farhan Zolkepli. "Critical strategies for construction players in the adoption of biophilic city concept in Malaysia." *Planning Malaysia* 18, no. 1 (2020): 181–192. <a href="http://dx.doi.org/10.21837/pm.v18i11.719">http://dx.doi.org/10.21837/pm.v18i11.719</a>
- Ngadi, Ehwan. "COVID19: Implikasi Pengajaran dan Pembelajaran Atas Talian." [COVID19: Implications of Online Teaching and Learning]. *Risalah USIM*, August 5, 2020. <a href="https://www.usim.edu.my/news/in-our-words/covid19-implikasi-pengajaran-dan-pembelajaran-atas-talian/">https://www.usim.edu.my/news/in-our-words/covid19-implikasi-pengajaran-dan-pembelajaran-atas-talian/</a>
- Raja Muhammad Rooshdi, Raja Rafidah, Muhd Zaimi Abd Majid, Shaza Rina Sahamir, and Noor Akmal Adillah Ismail. "Relative Importance Index of Sustainable Design and Construction Activities Criteria for Green Highway." *Chemical Engineering Transactions* 63 (2018): 151–156. <a href="https://doi.org/10.3303/CET1863026">https://doi.org/10.3303/CET1863026</a>
- Ramadass, Lalitha, Sushanth Arunachalam, and Sagayasree Z. "Applying Deep Learning Algorithm to Maintain Social Distance in Public Place Through Drone Technology." *International Journal of Pervasive Computing and Communications* 16, no. 3 (June 10, 2020): 223–234. https://doi.org/10.1108/IJPCC-05-2020-0046

- Sahari, Mohamad Norhadie. "PKP Tidak Halang Umat Islam Jayakan World #QuranHour." [PKP Does Not Stop Muslims Jayakan World #QuranHour]. *Utusan Borneo Online*, May 15, 2020. <a href="https://www.utusanborneo.com.my/2020/05/15/pkptidak-halang-umat-islam-jayakan-world-quranhour/05/15/pkp-tidak-halang-umat-islam-jayakan-world-quranhour">https://www.utusanborneo.com.my/2020/05/15/pkptidak-halang-umat-islam-jayakan-world-quranhour</a>
- Sarada Devi, R S and Azlan Shah Nazrudin. "Emosi Terperuk di Rumah." [Emotions at Home]. *Harian Metro*, April 6, 2020. <a href="https://www.hmetro.com.my/rencana/2020/04/562982/emosi-terperuk-di-rumah">https://www.hmetro.com.my/rencana/2020/04/562982/emosi-terperuk-di-rumah</a>
- Singh, Shweta, Deblina Roy, Krittika Sinha, Sheeba Parveen, Ginni Sharma, and Gunjan Joshi. "Impact of COVID-19 and Lockdown on Mental Health of Children and Adolescents: A Narrative Review with Recommendations." *Psychiatry Research* 293, no. 113429 (November 2020):1–10. <a href="https://dx.doi.org/10.1016/j.psychres.2020.113429">https://dx.doi.org/10.1016/j.psychres.2020.113429</a>
- Spitzenstätter, Daniel and Tatjana Schnell. "The Existential Dimension of the Pandemic: Death Attitudes, Personal Worldview, and Coronavirus Anxiety." *Death Studies* (December 24, 2020): 1–11. https://doi.org/10.1080/07481187.2020.1848944.
- Talha, Rozita. "Kajian Kes Impak Perintah Kawalan Pergerakan Kepada Penduduk Malaysia." [Case Study Impacts Movement Control Orders to Malaysians]. 

  \*Department of Statistics Malaysia Official Portal, 2020: 1-3. 

  https://www.dosm.gov.my/v1/uploads/files/6\_Newsletter/Newsletter%202020/DOS

  M\_BPPD\_1-2020\_Siri-17.pdf
- Thunström, Linda., Stephen C. Newbold, David Finnoff, Madison Ashworth, and Jason F. Shogren. "The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19." *Journal of Benefit-Cost Analysis* 11, no. 2 (2020): 179–195. https://doi.org/10.1017/bca.2020.12
- Wee, Sui-Lee., Donald G. McNeil Jr., and Javier C. Hernández. "W.H.O. declares global emergency as Wuhan coronavirus spreads." *New York Times*, January 30, 2020. <a href="https://www.nytimes.com/2020/01/30/health/coronavirus-world-health-organization.html">https://www.nytimes.com/2020/01/30/health/coronavirus-world-health-organization.html</a>